



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-6672; Directorate Identifier 2016-NM-022-AD; Amendment 39-18706; AD 2016-22-17]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This AD was prompted by a report that the grounding jumpers between the environmental control system (ECS) bracket and the current return network (CRN) straps near certain passenger entry doors were not bonded correctly during manufacturing. This AD requires changing the configuration of the grounding jumpers connecting the ECS brackets and CRN straps; measuring the bond resistance; and doing related investigative and corrective actions if necessary. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1;

fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6672.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6672; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Brendan Shanley, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6492; fax: 425-917-6590; email: [brendan.shanley@faa.gov](mailto:brendan.shanley@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 787-8 airplanes. The NPRM published in the Federal Register on June 3, 2016 (81 FR 35655) (“the NPRM”). The NPRM was prompted by a report that the grounding jumpers between the ECS bracket and the CRN straps near passenger 1 left and 1 right entry doors were not bonded correctly during manufacturing. The NPRM proposed to require changing the

configuration of the grounding jumpers connecting the ECS brackets and CRN straps; measuring the bond resistance; and doing related investigative and corrective actions if necessary. We are issuing this AD to prevent an incorrectly bonded jumper between the ECS bracket and the CRN strap, which does not provide proper grounding to the door frames at doors 1 left and 1 right. If a fault occurs, an electrical shock hazard can exist and could result in serious or fatal injury to passengers and flight crew.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Support for the NPRM**

Boeing stated that it concurs with the content of the NPRM. United Airlines (UAL) stated that the 12-month compliance time is a safe and reasonable timeframe.

### **Requests to Reference New Service Information and Add Credit**

All Nippon Airways and UAL requested that we revise the NPRM to reference Boeing Service Bulletin B787-81205-SB530025-00, Issue 002, dated June 2, 2016 ("B787-81205-SB530025-00 Issue 002"), and give credit for actions accomplished using Boeing Service Bulletin B787-81205-SB530025-00, Issue 001, dated July 17, 2014 ("B787-81205-SB530025-00 Issue 001").

We agree with the commenters' requests. B787-81205-SB530025-00 Issue 002 clarifies instructions and specifies the category of fay seal application. No additional work is required by B787-81205-SB530025-00 Issue 002. B787-81205-SB530025-00 Issue 002 has steps that are labeled as Required for Compliance (RC).

We have revised paragraphs (c) and (g) of this AD to reference B787-81205-SB530025-00 Issue 002, and added new paragraph (h) of this AD to provide credit for actions accomplished prior to the effective date of this AD using

B787-81205-SB530025-00 Issue 001. We have redesignated subsequent paragraphs accordingly. We have added new paragraph (i)(4) of this AD to address the steps marked RC in B787-81205-SB530025-00 Issue 002.

### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

### **Related Service Information under 1 CFR Part 51**

We reviewed B787-81205-SB530025-00 Issue 002. The service information describes procedures for changing the configuration of the grounding jumpers connecting the ECS brackets and CRN straps; measuring the bond resistance; and related investigative and corrective actions if necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD affects 6 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Installation	6 work-hours X \$85 per hour = \$510	\$100	\$610	\$3,660

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2016-22-17 The Boeing Company:** Amendment 39-18706; Docket No. FAA-2016-6672; Directorate Identifier 2016-NM-022-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Service Bulletin B787-81205-SB530025-00, Issue 002, dated June 2, 2016 (“B787-81205-SB530025-00 Issue 002”).

**(d) Subject**

Air Transport Association (ATA) of America Code 53; Fuselage.

**(e) Unsafe Condition**

This AD was prompted by a report that the grounding jumpers between the environmental control system (ECS) bracket and the current return network (CRN) straps near passenger 1 left and 1 right entry doors were not bonded correctly during manufacturing. We are issuing this AD to prevent an incorrectly bonded jumper between the ECS bracket and the CRN strap, which does not provide proper grounding to the door frames at doors 1 left and 1 right. If a fault occurs, an electrical shock hazard can exist and could result in serious or fatal injury to passengers and flight crew.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Grounding Jumper Revision**

Within 12 months after the effective date of this AD: Change the configuration of the grounding jumpers connecting the ECS brackets and CRN straps, including measuring the bond resistance and doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of B787-81205-SB530025-00 Issue 002. Do all applicable related investigative and corrective actions before further flight.

**(h) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin B787-81205-SB530025-00, Issue 001, dated July 17, 2014.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An

AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(j) Related Information**

For more information about this AD, contact Brendan Shanley, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6492; fax: 425-917-6590; email: [brendan.shanley@faa.gov](mailto:brendan.shanley@faa.gov).

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Service Bulletin B787-81205-SB530025-00, Issue 002, dated June 2, 2016.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 25, 2016.

Dionne Palermo,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2016-26614 Filed: 11/21/2016 8:45 am; Publication Date: 11/22/2016]